

Montana's on the *Move*



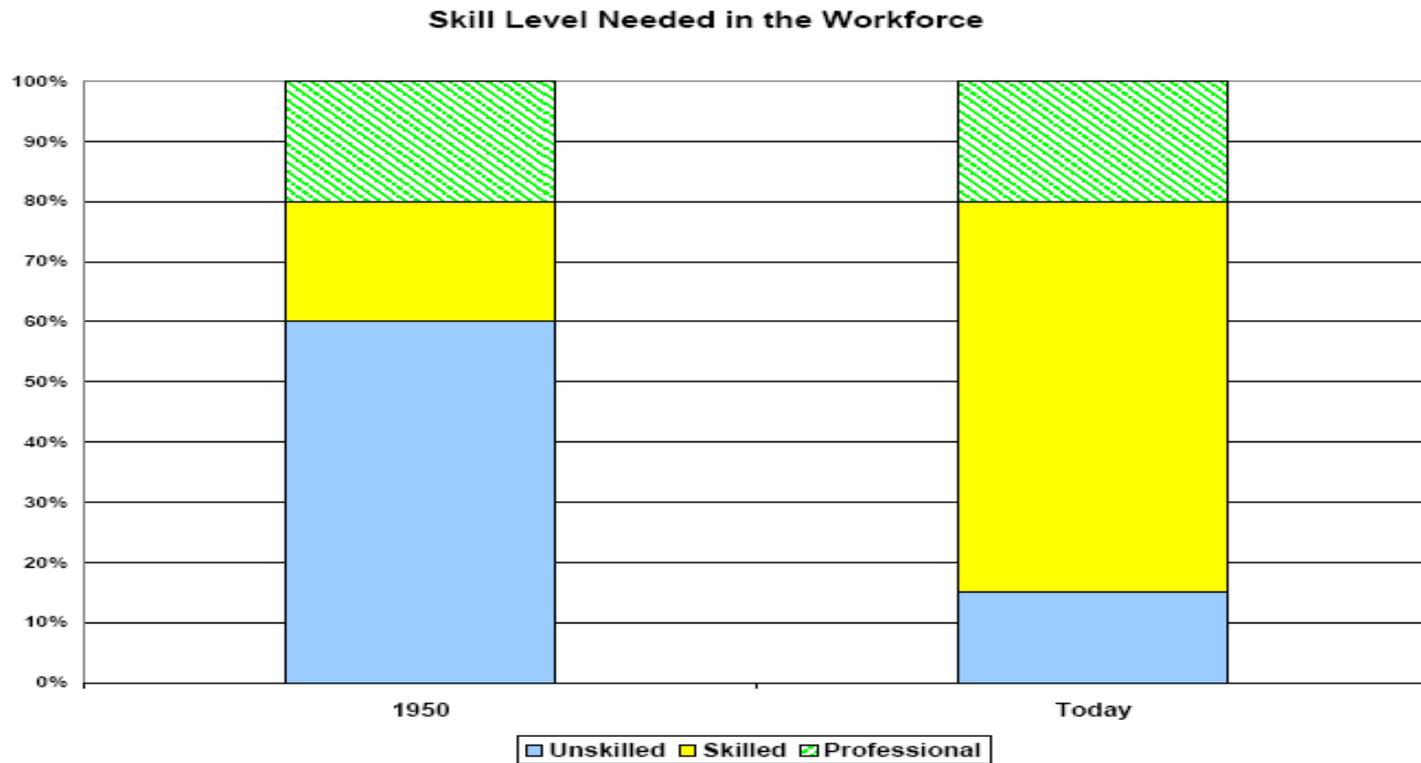
MASS Spring Conference

April 1, 2008

Governor Brian Schweitzer

Montana's on the *Move*

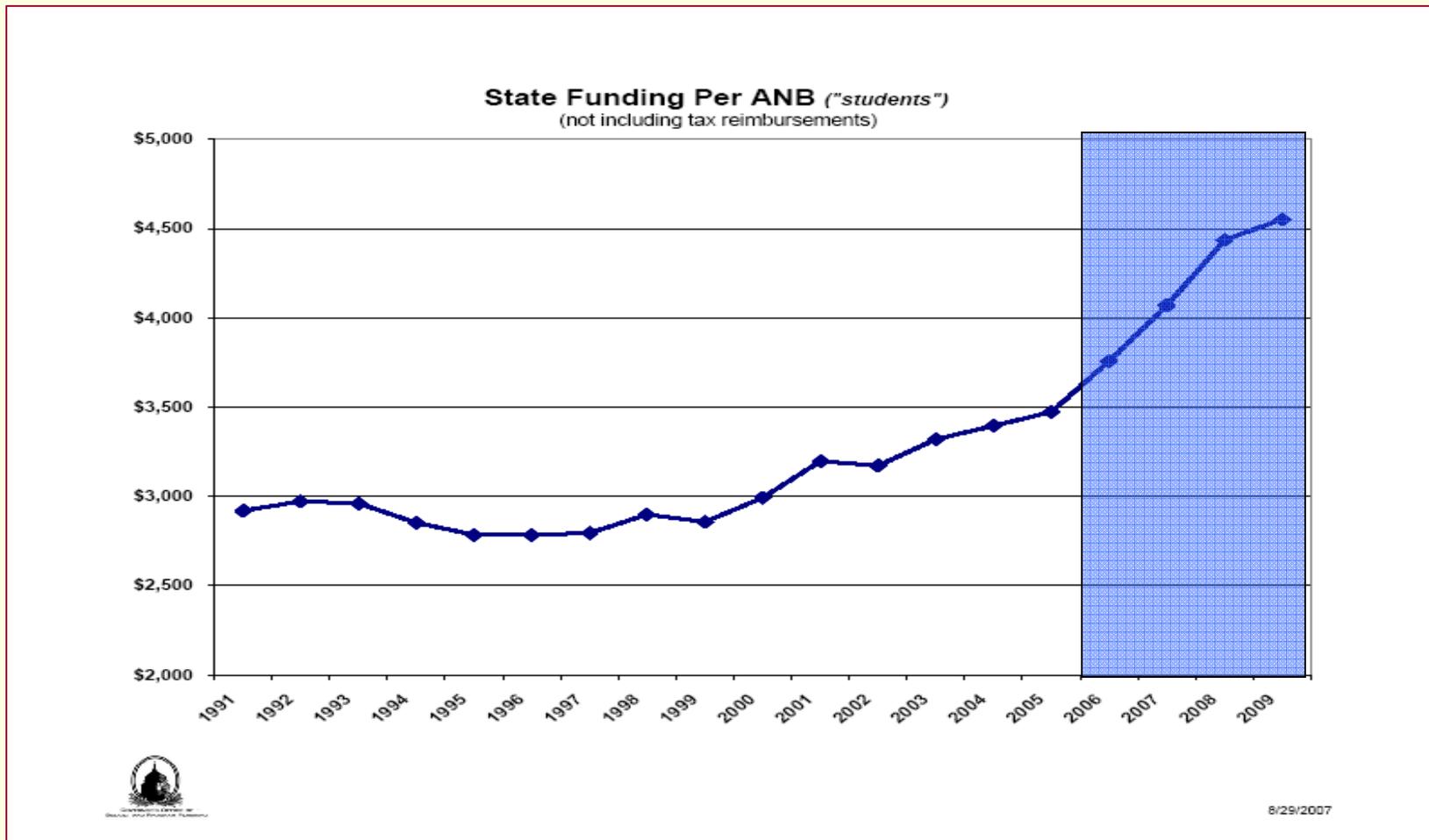
Building a Ready Workforce



Source: Office of Public Instruction
9/5/2007

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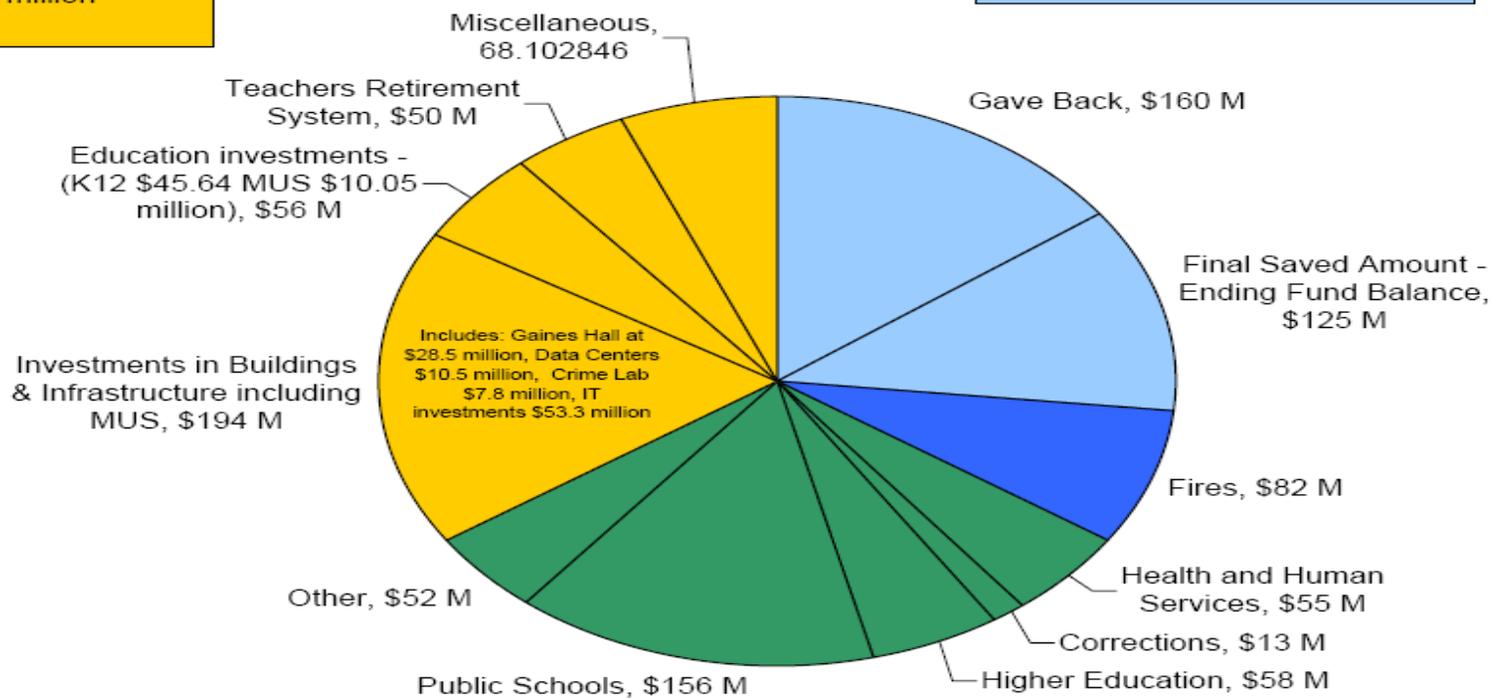
Quality K-12 Education



+ / - \$1 Billion

Total One-time investments: \$367 million

Total of Gave Back, Savings, and Savings that needed to be spent on Fires: \$367 million



Total Investments Ongoing expenditures: \$334 million

Vetoes: \$39.4 million

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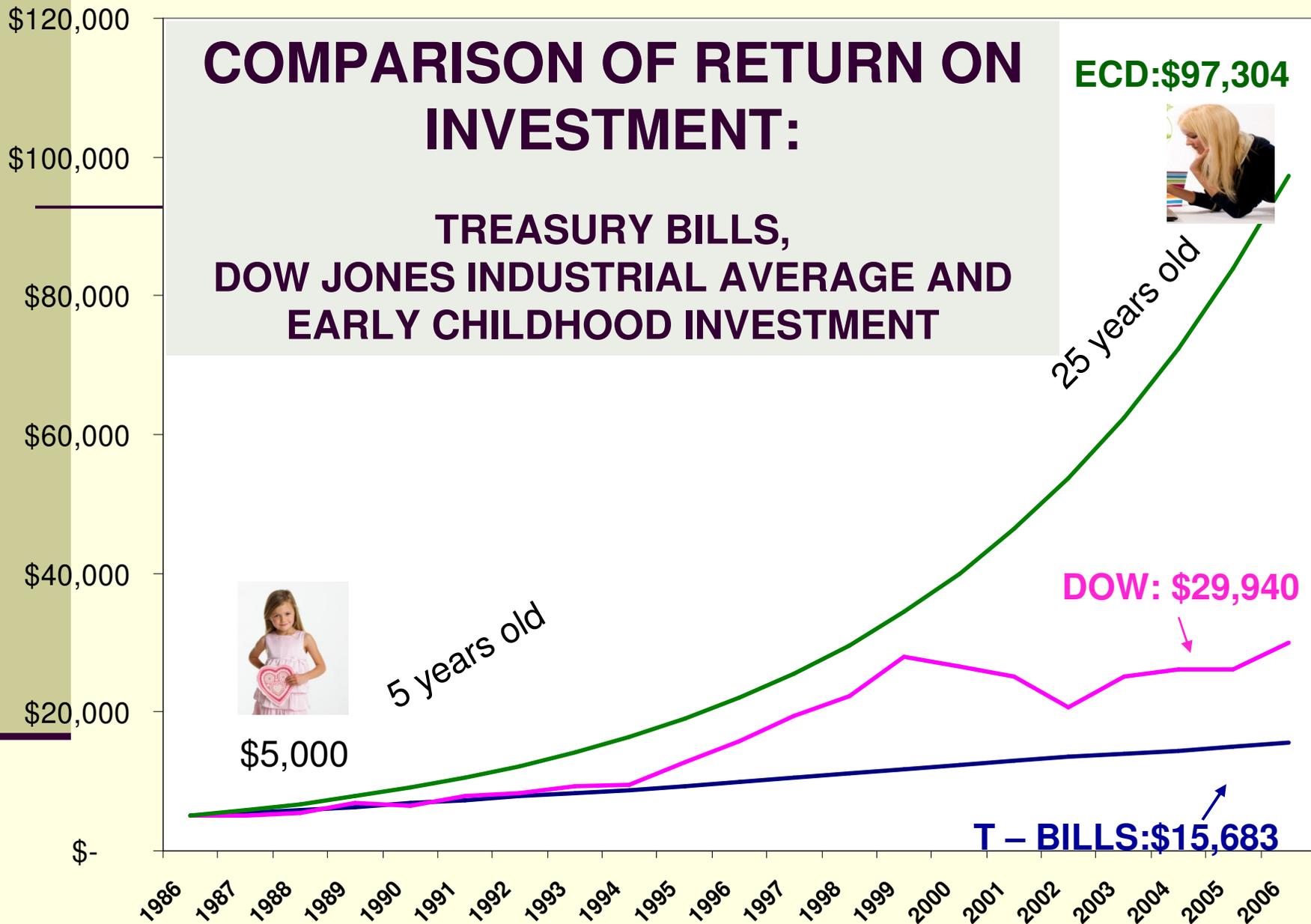
Investing in a World-class Education System



- Education for Life
- Investing Dollars
- Innovation
- Accountability
- Building partnerships
- Energy Independence

COMPARISON OF RETURN ON INVESTMENT:

TREASURY BILLS, DOW JONES INDUSTRIAL AVERAGE AND EARLY CHILDHOOD INVESTMENT



Sources: Treasury Bills (T-BILLS) – Federal Reserve Statistical Release;
DOW (Dow Jones Industrial Average) – Dow Jones Indexes;
Early Childhood Development (ECD) – Rolnick, Arthur, “Children of the Code”

Compiled by Census and Economic Information Center,
Montana Department of Commerce, www.ceic.mt.gov,
(406) 841-2740, September 2007

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Full-time Kindergarten – Good for kids & good for schools

By GAIL SCHONTZLER Chronicle Staff Writer 3/25/2008

”School Board trustees reacted favorably to the idea of expanding full-time kindergarten, from the current 26 percent to 85 percent of Bozeman kindergartners. Doing so would increase the elementary budget by \$400,000. Full-time kindergarten brings in more revenue than it costs because the schools already are paying for utilities, building maintenance and administrative overhead.”

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Study praises pension funding

By The Gazette State Bureau - December 19, 2007

HELENA - A national study released Tuesday ranks Montana as a "top performer" at improving the financial status of its public employee and teacher pension systems ...

PERS, TRS and ORP

One time Cash : \$175 Million

On-going Employer & State Contribution: \$518.1 Million



"Promises with a Price," the Pew Charitable Trusts

Source: <http://www.billingsgazette.net/articles/2007/12/19/news/state/43-pensionfund.txt>

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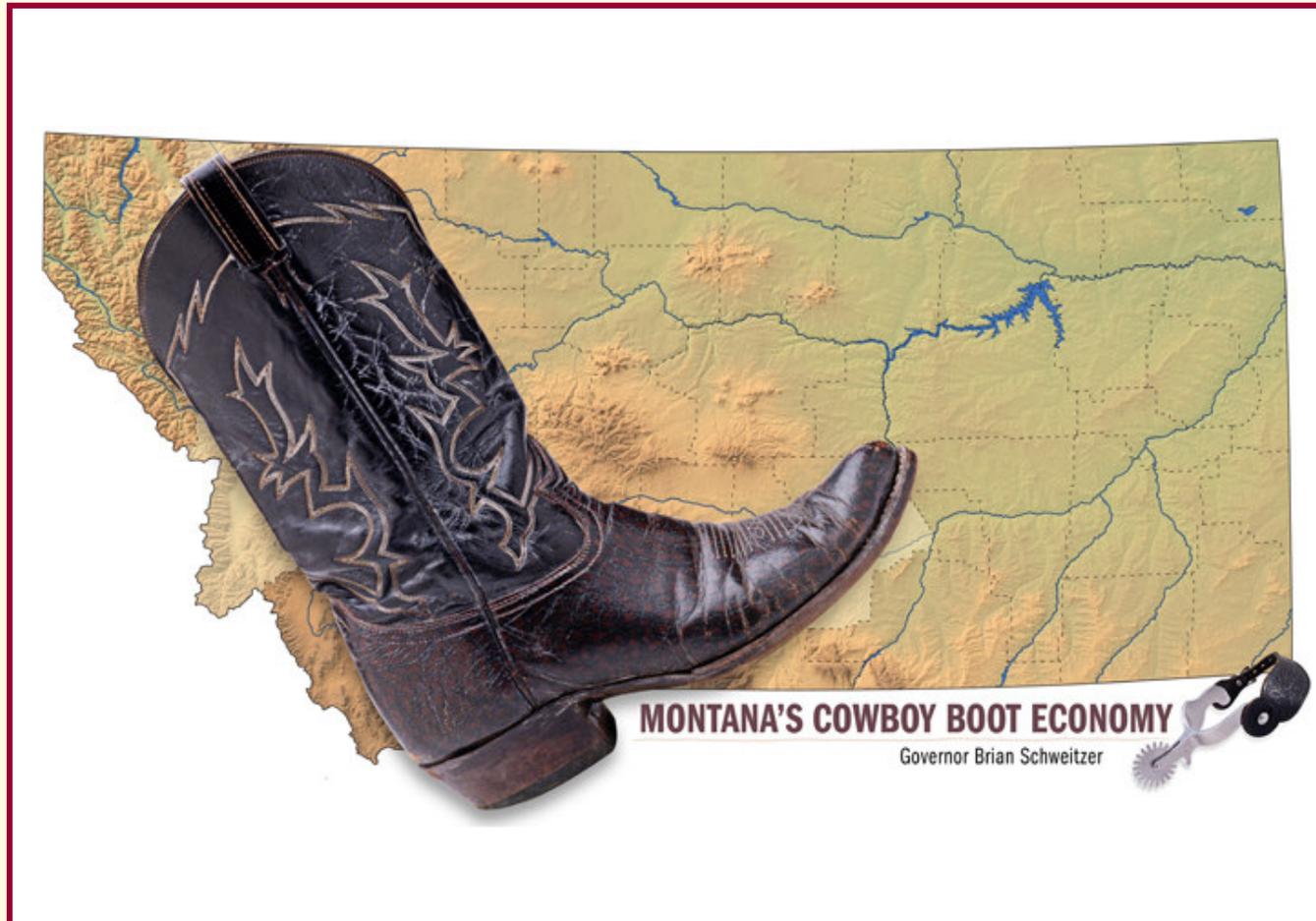
Investing in Quality Educators

Typical Teacher Scenario

- Recent UM graduate with avg. \$20k debt
- Math teacher in small town
- Average starting salary -- \$25,318*
- Increased school funding \$38.5 M for FY08 = \$3000/quality educator
- NEW -- Quality Educator Loan Forgiveness
 - \$12,000 for 4 years for qualifying teacher
- Retirement



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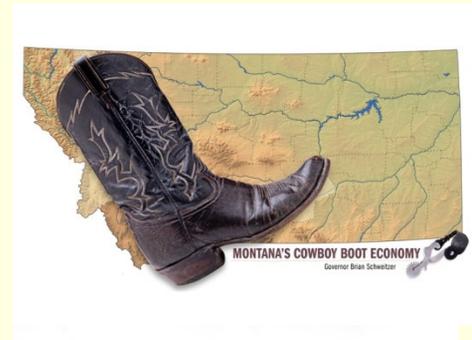
Changing Demographics 2007-2017

■ Future Challenge:

- MT's population will grow by 6.6 %
- Less babies and more elders.
- High school graduates expected to decline by nearly 20 %
- Traditional college students --18 to 24 --projected to decline 19 %

■ Today

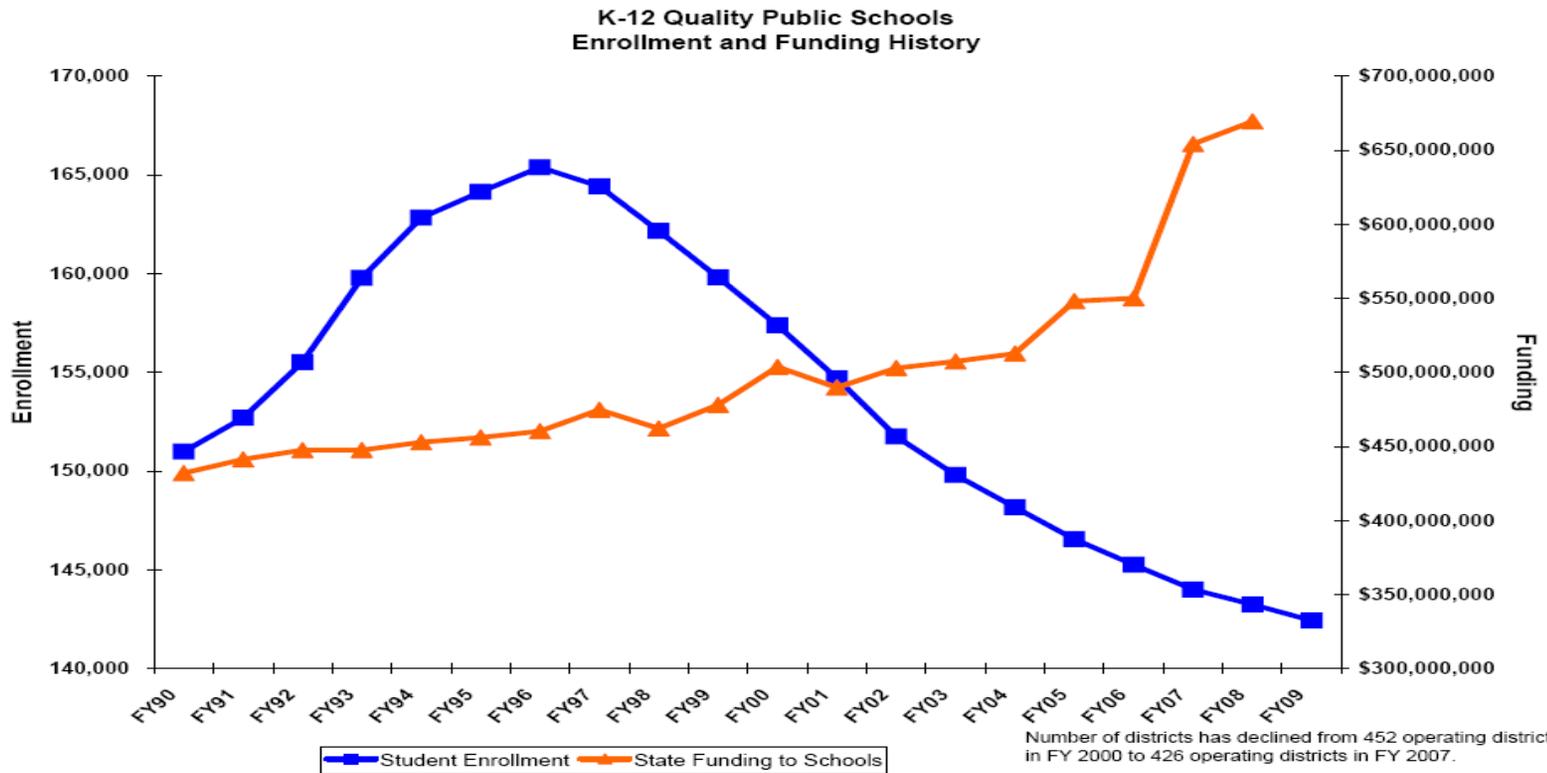
- One in two MT HS students go on to a college after graduation.
- Less than one in five students get a 4 year degree from MUS in 4 years.



Source:
U.S. Census Bureau
OCHE

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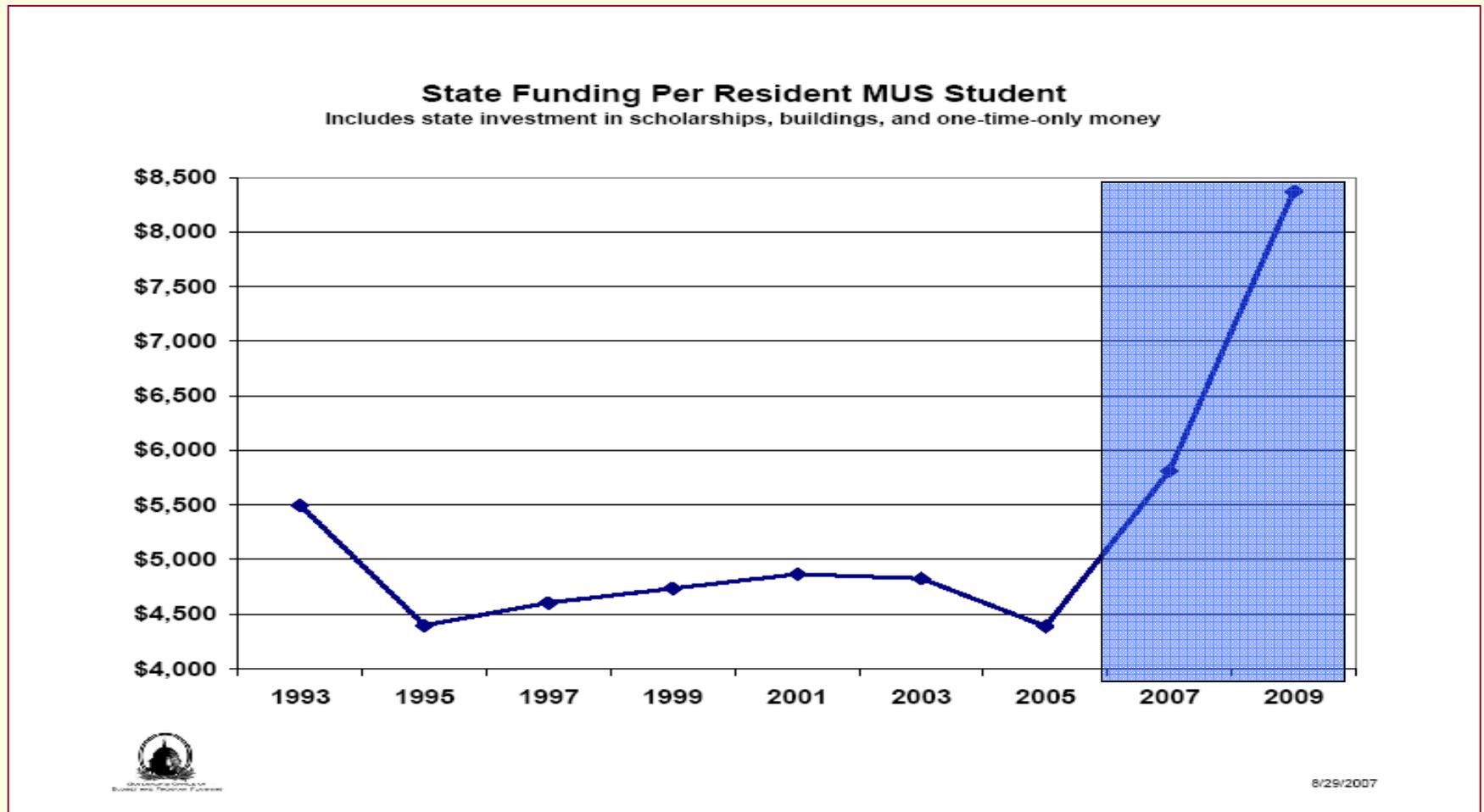
Declining enrollment today is tomorrow's workforce challenge



1/4/2008

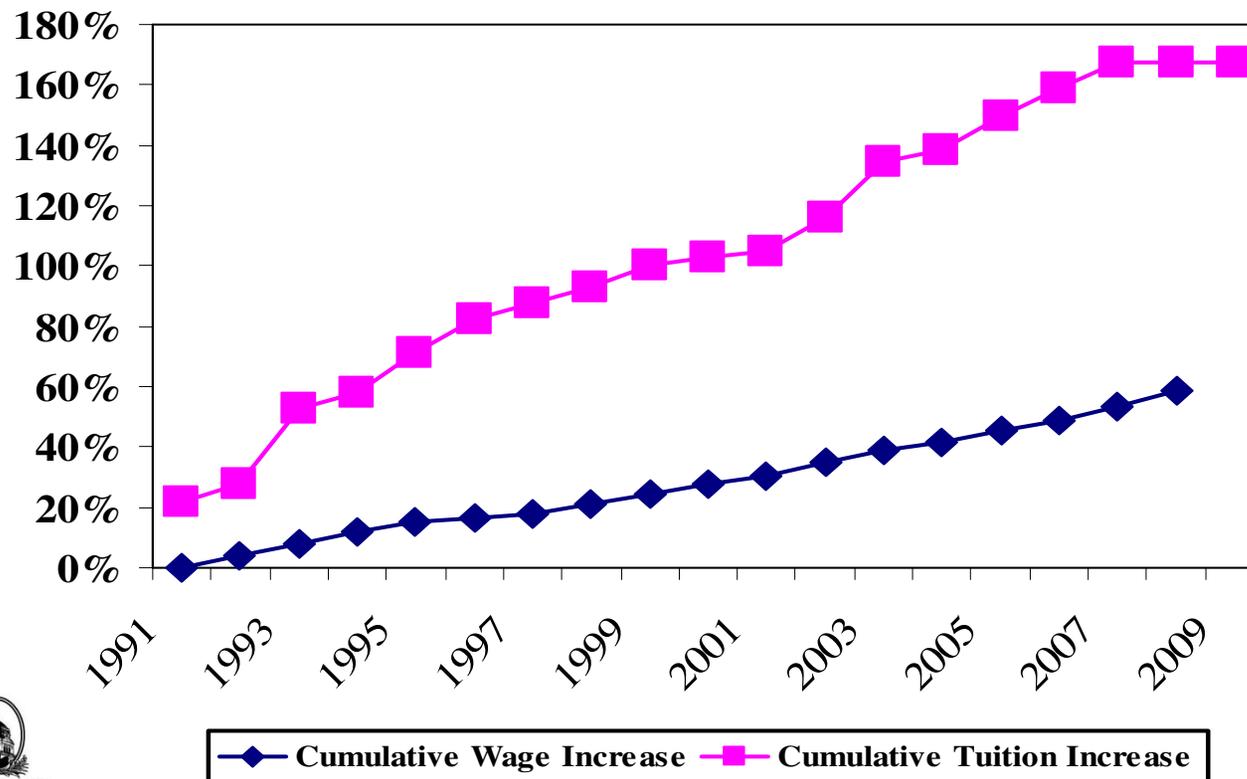
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Going to college matters



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**Cumulative Wage and Tuition Growth
in the Montana University System**



Governor Brian Schweitzer

Montana's on the *Move*

Best and brightest Scholarship



More than 2000 scholarships awarded



WIND



BIOMASS



GEO THERMAL



OIL and GAS



COAL

Middle East

GENERAL LIBRARIES
DEPOSITORY



1,000 Nautical Miles



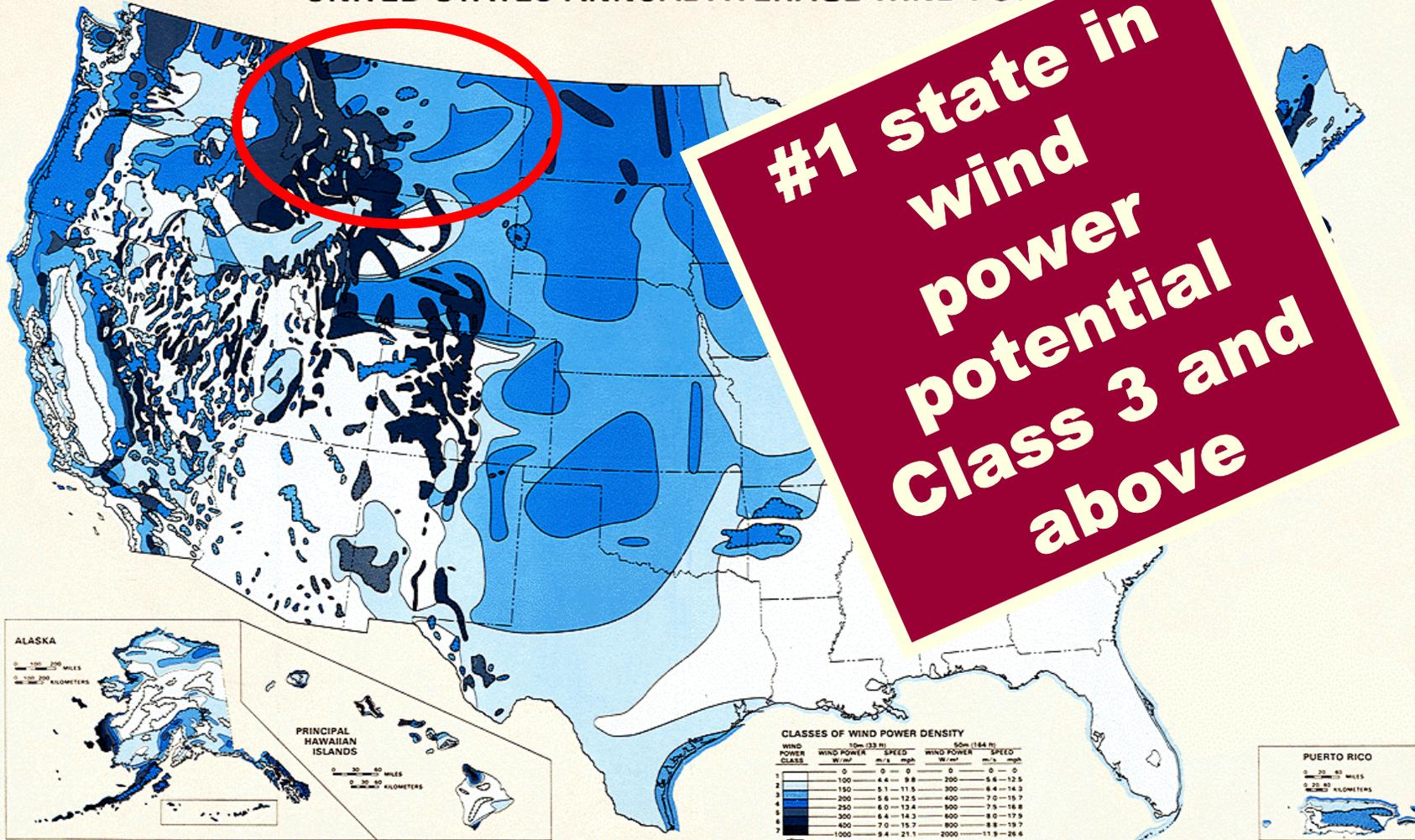
MONTANA IS
WIND
COUNTRY



ROPING THE WIND FOR TODAY'S POWER AND TOMORROW'S ENERGY SOLUTION

US Annual Average Wind Power

UNITED STATES ANNUAL AVERAGE WIND POWER

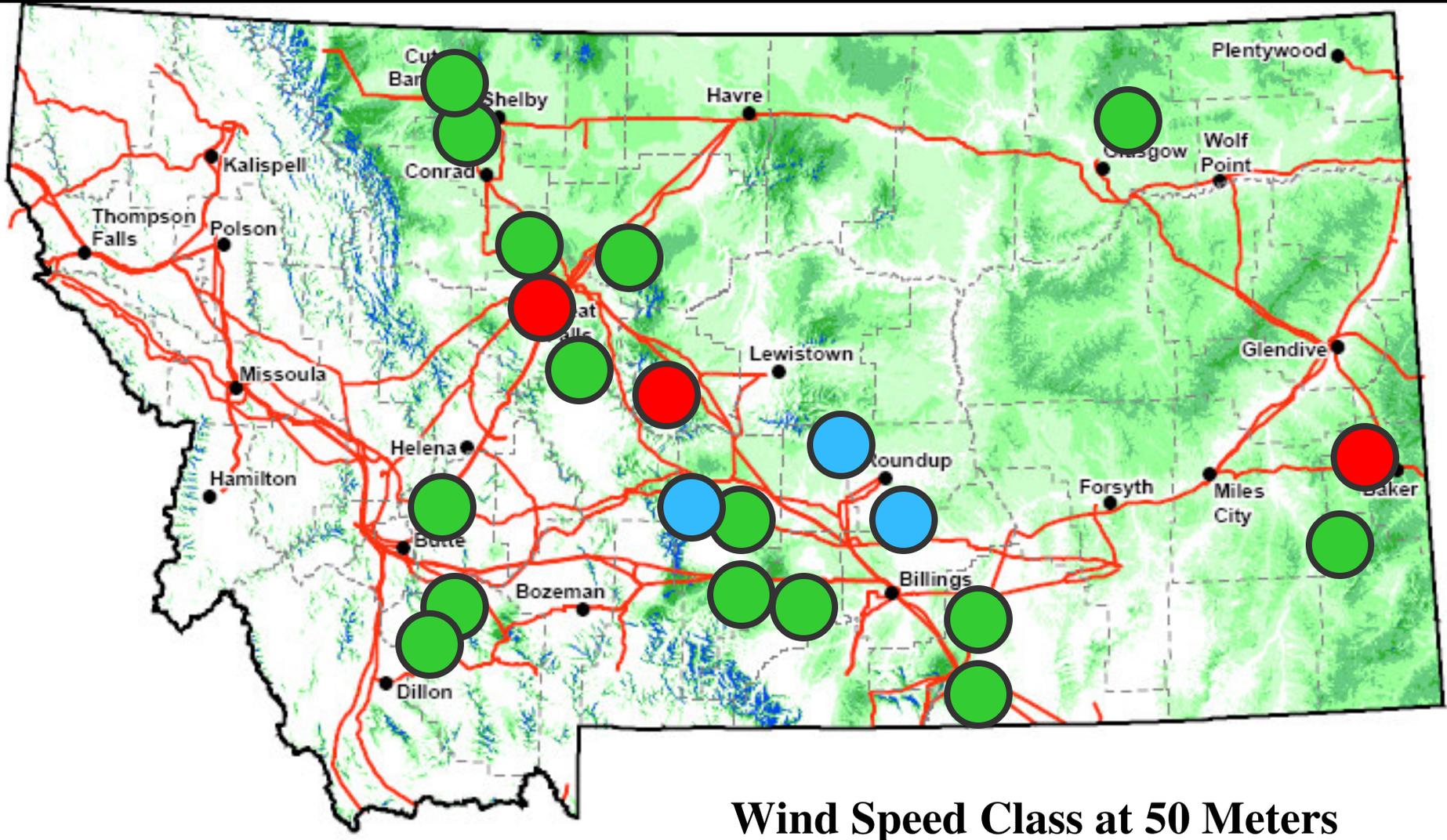


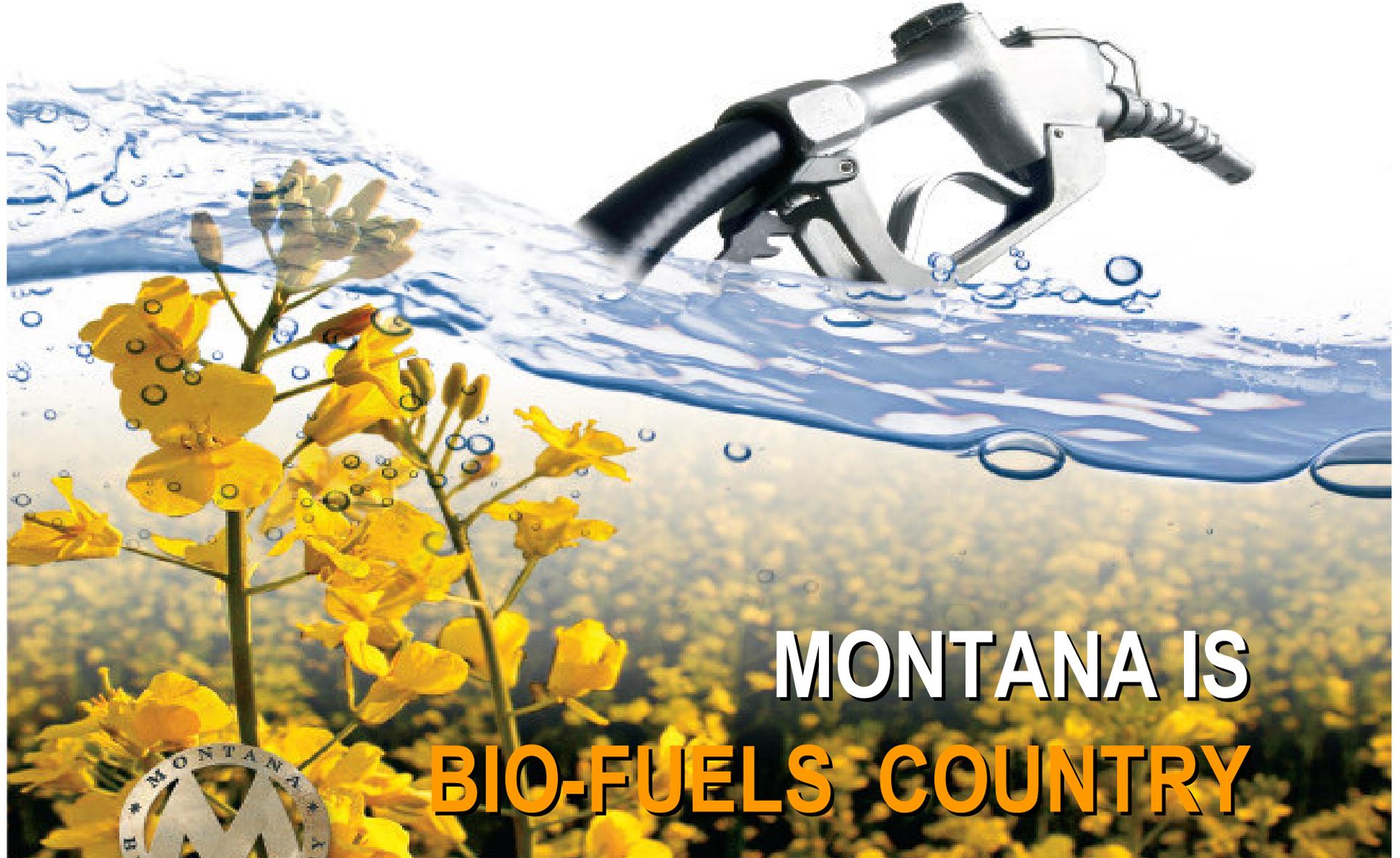
Montana's Commitment to Wind Power Development



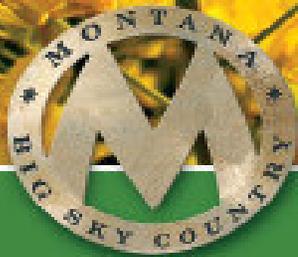
- **Montana adopted a state renewable energy portfolio standard in 2005 requiring 15% renewable power by 2015**
- **Montana has seven (7) tax incentives for the development of wind power**
- **Signed HB 330 into law to allow Clean & Renewable Energy Bonds (CREBs) incentive for local & tribal government wind power**

WIND FARM ACTIVITY

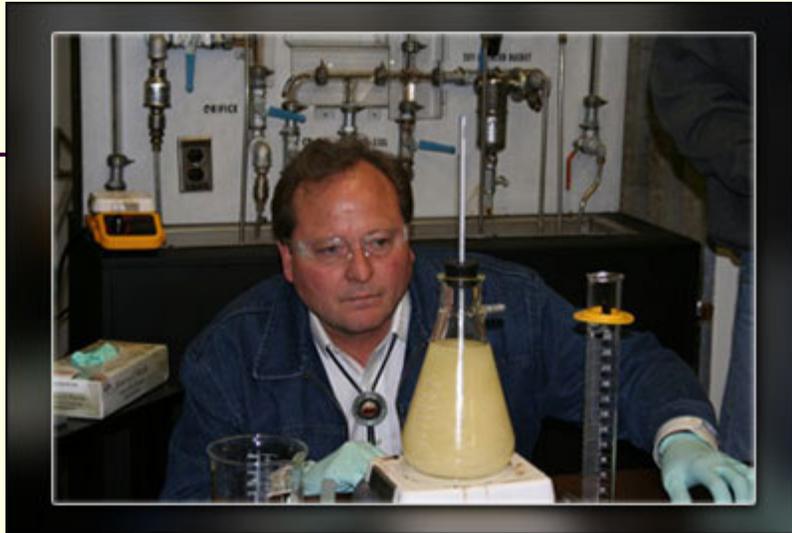




MONTANA IS BIO-FUELS COUNTRY



DEVELOPING BIOMASS FUELS FOR TOMORROW'S ENERGY



- **16.5 M acres of crop land suitable for growing grain and/or seed crops for use in ethanol & bio-diesel**
- **19 M acres of non-reserved forest land available for ethanol from bio-mass**



Montana's on the *Move*

Education Employment & Economic Development

K-12, Higher Ed & Industry Partnerships

State Workforce Investment Board (SWIB)

- Apprenticeship Committee
- Economic Development Committee
- Health Care Ad-hoc Committee



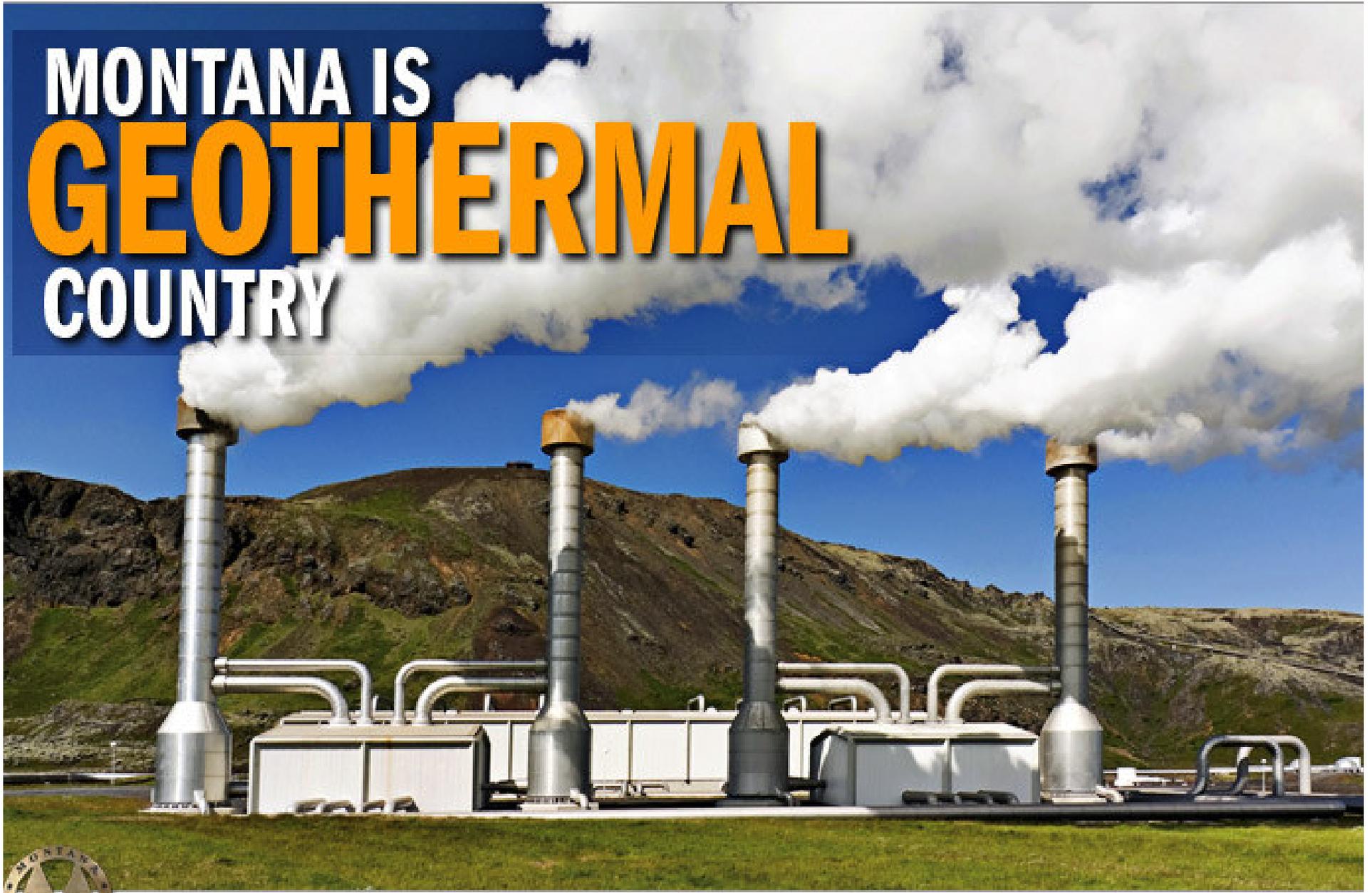
- **Montana has two state level production incentives:**

- (i) **reduction in state motor fuels tax collected on ethanol blends at specially marked pumps**
 - (ii) **30 cent per gallon incentive to the ethanol producer using Montana agricultural products**

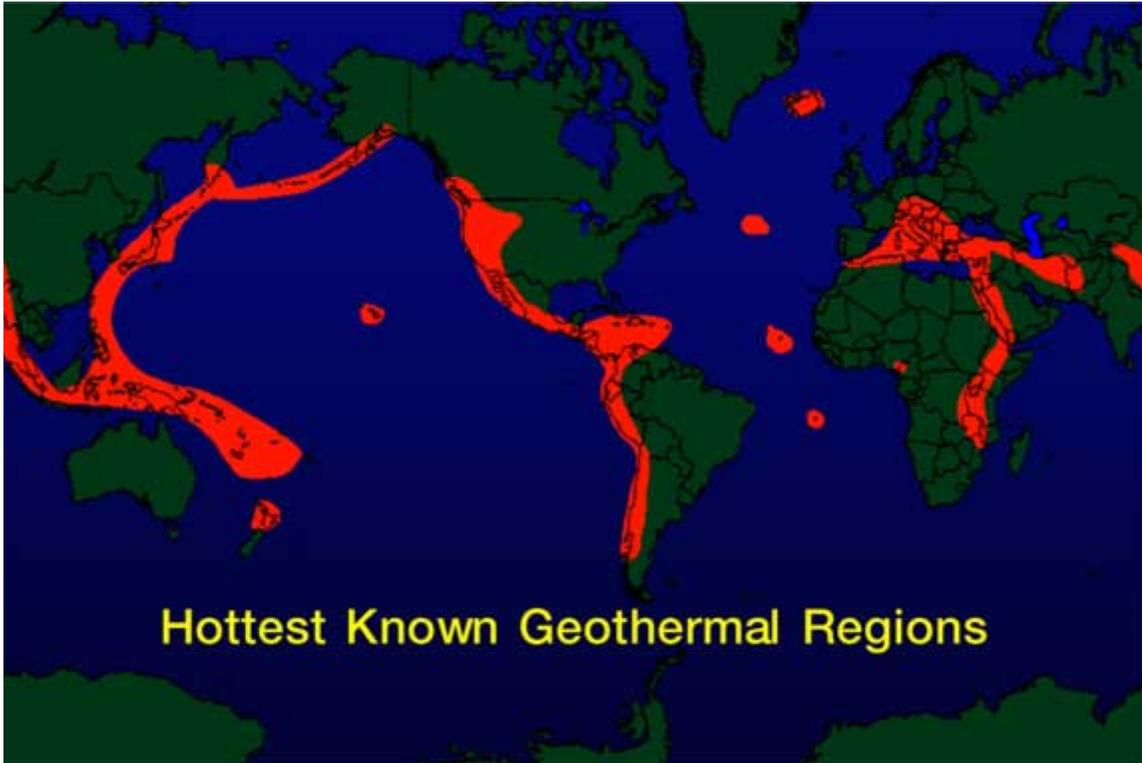


- **10% ethanol blending requirement when in state production reaches 40 million gallons/year**
- **Bio-diesel tax credits on production & fueling facilities**

MONTANA IS **GEO THERMAL** COUNTRY



TAPPING A NATURAL HEAT SOURCE FOR TOMORROW'S POLLUTION-FREE ENERGY



Hottest Known Geothermal Regions

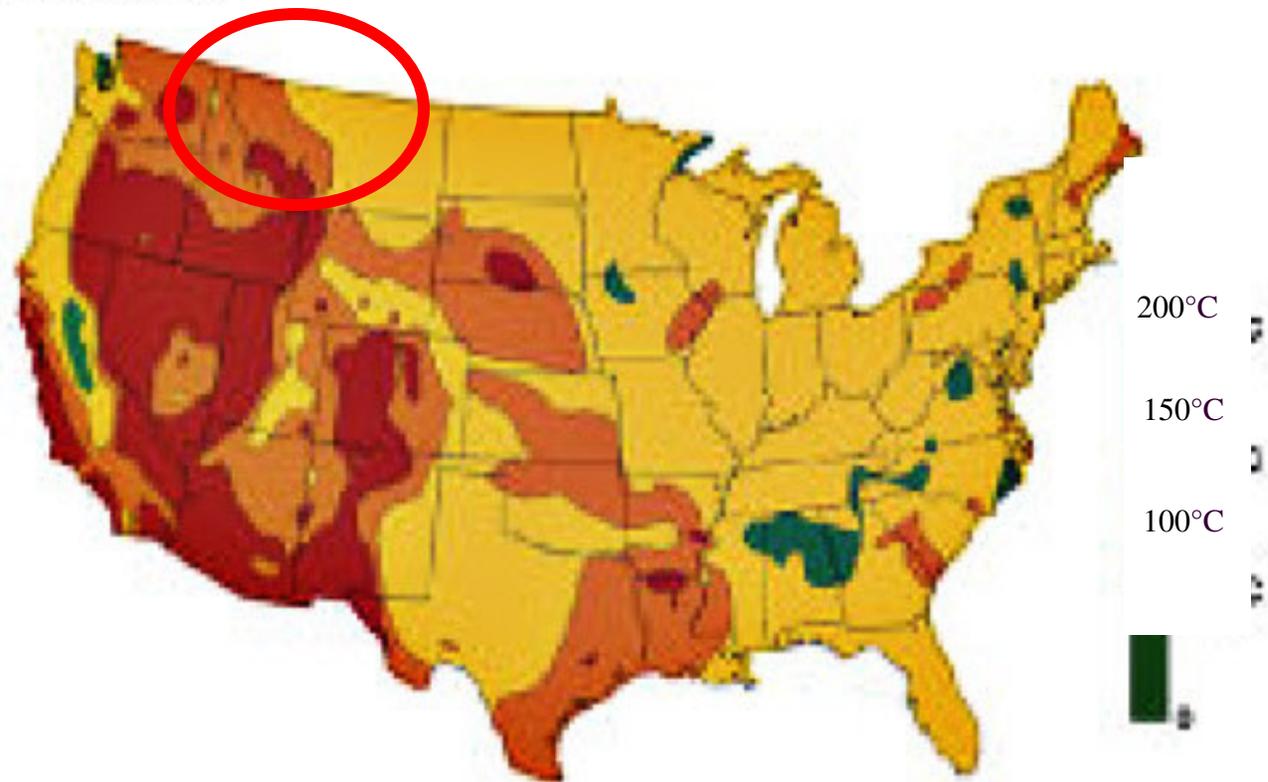


Geothermal Power Plants

TECHNOLOGY TODAY

While large scale power plants use water that is 300°F and higher, new technologies generate electricity at temperatures as low as 160°F. These turbines are suitable for distributed generation projects, where electricity is used on site rather than exported to the grid. Power plants are modular, with sizes as small as 250 kw.

New plants coming on-line this year in Idaho, Nevada and California.



MONTANA IS GEOTHERMAL COUNTRY: TAPPING A NATURAL HEAT SOURCE FOR TOMORROW'S POLLUTION-FREE ENERGY



MONTANA IS

COAL COUNTRY



Turning our coal advantage into jobs & growth

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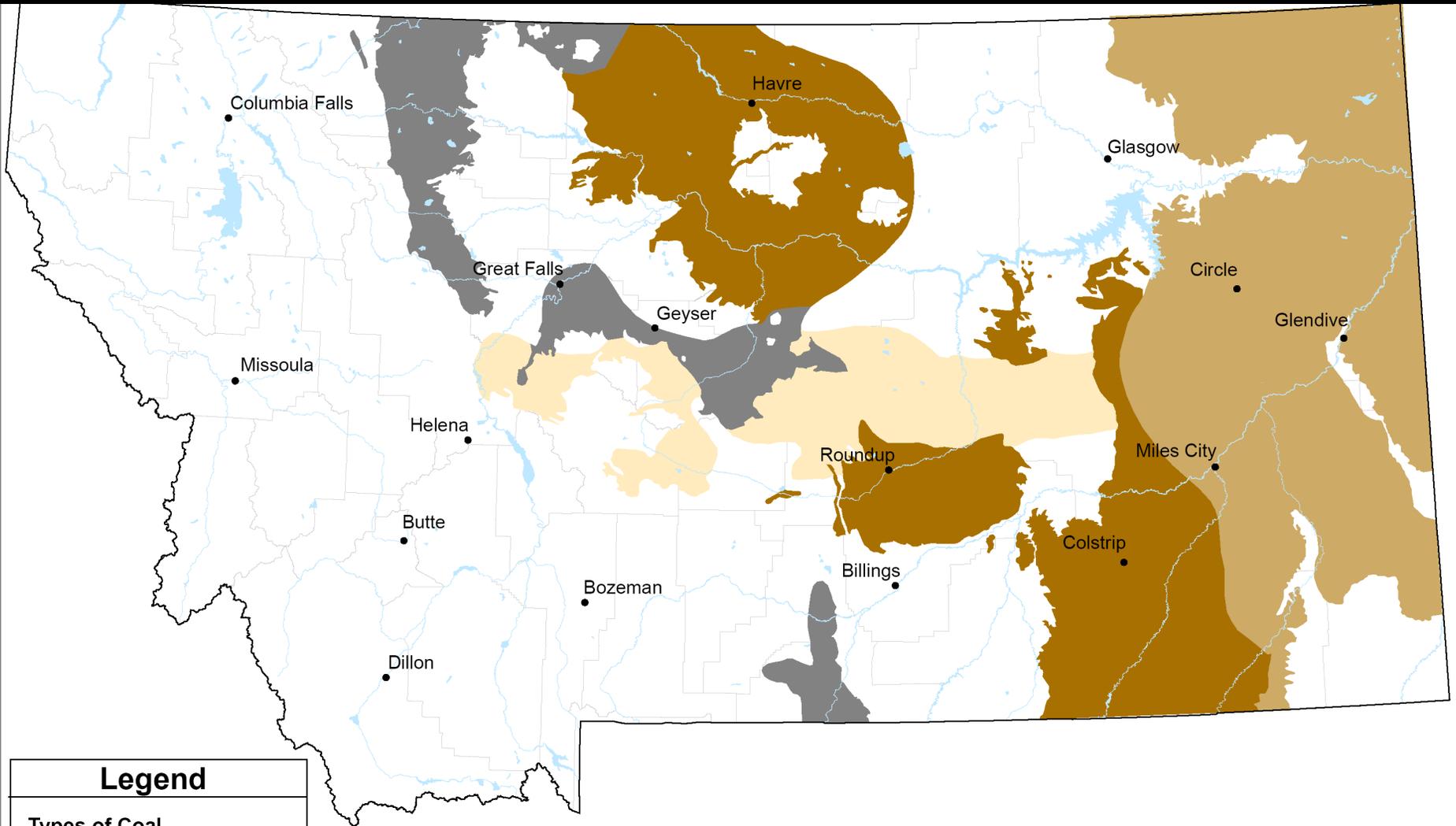
Montana Coal Reserves

120 Billion Tons

28% Nation's Coal

8% World's Coal

Montana Coal Deposits



Legend

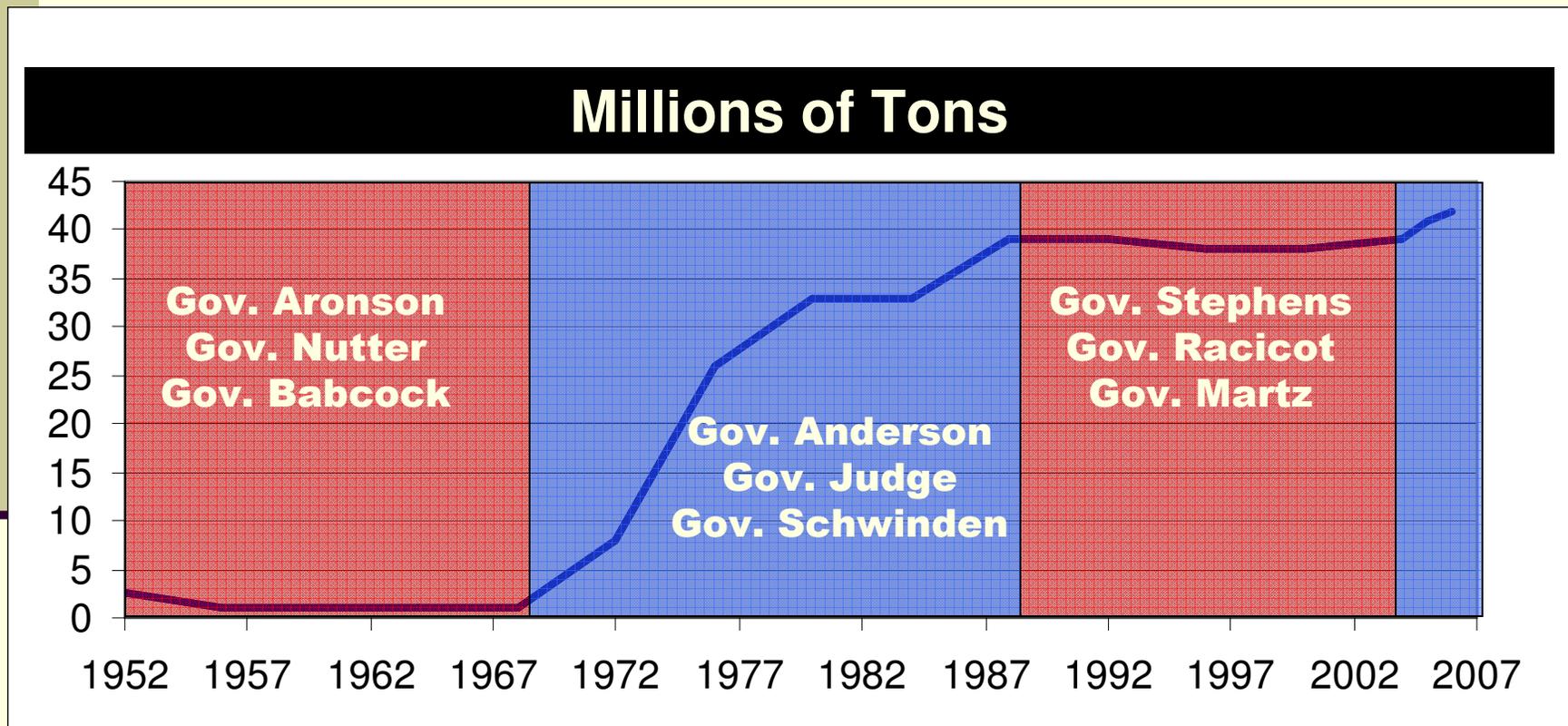
Types of Coal

-  Bituminous
-  Sub-bituminous
-  Lignite
-  Oil-shale
-  Major Rivers and Lakes



Sources of Information:
Coal deposits - Montana State University, 1974

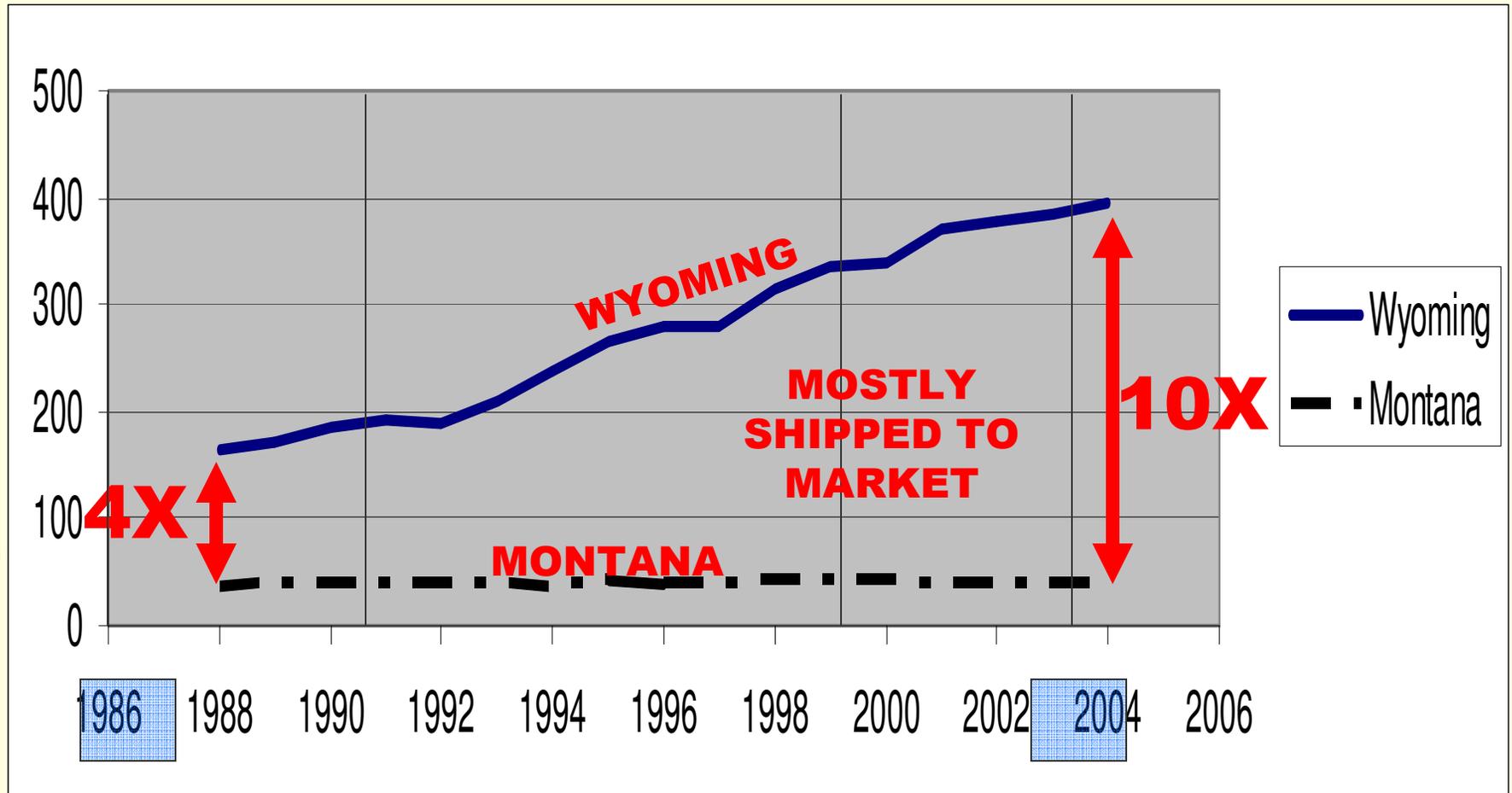
Montana Historic Coal Production 1952-2007



Source: US Department of Energy

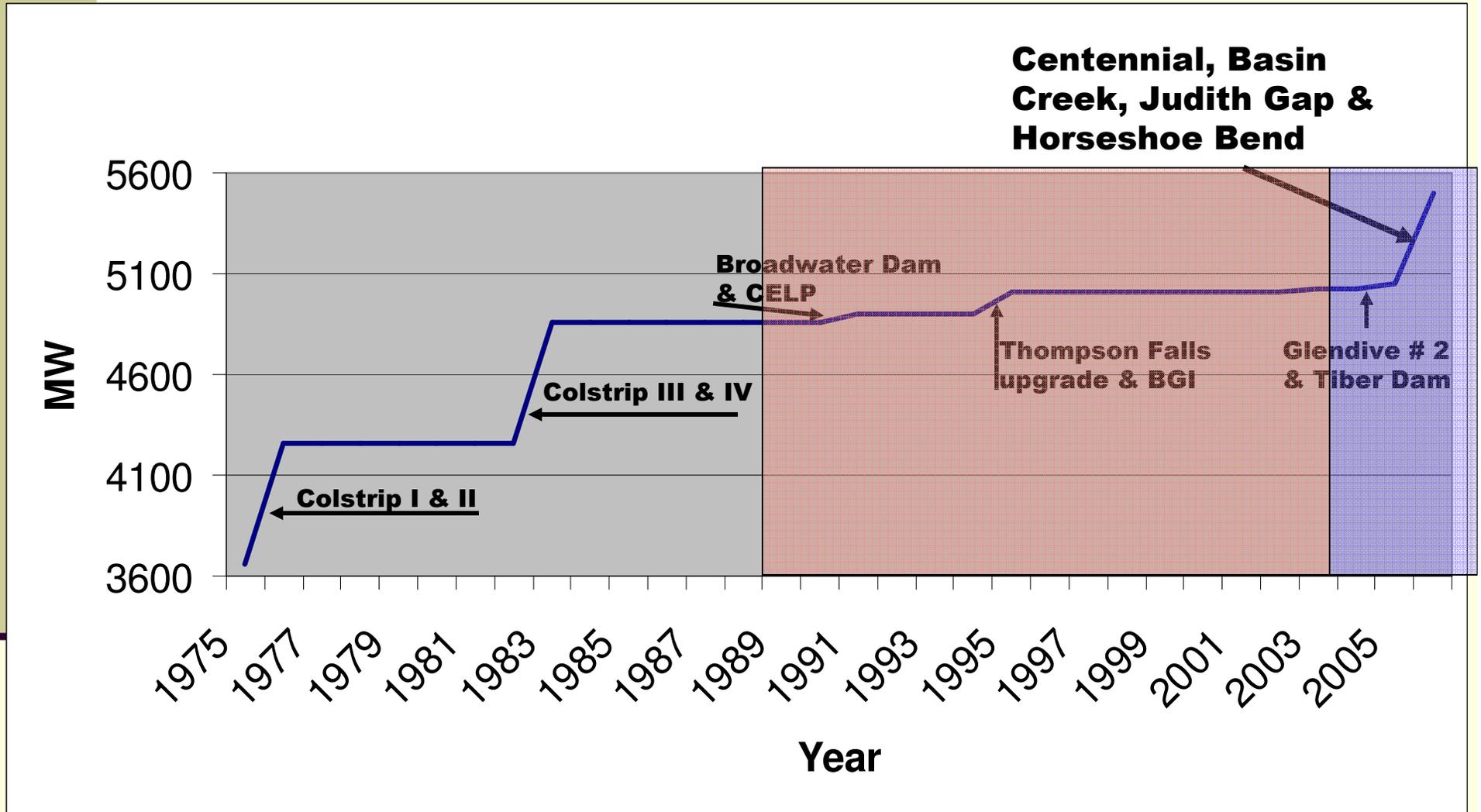
Coal Production: Montana/Wyoming 1988-2004

Millions of Tons of Coal



Source: US Department of Energy

Montana Generation Capacity (MW)





**MONTANA IS
OIL AND GAS COUNTRY**

Growth in Montana Oil Production

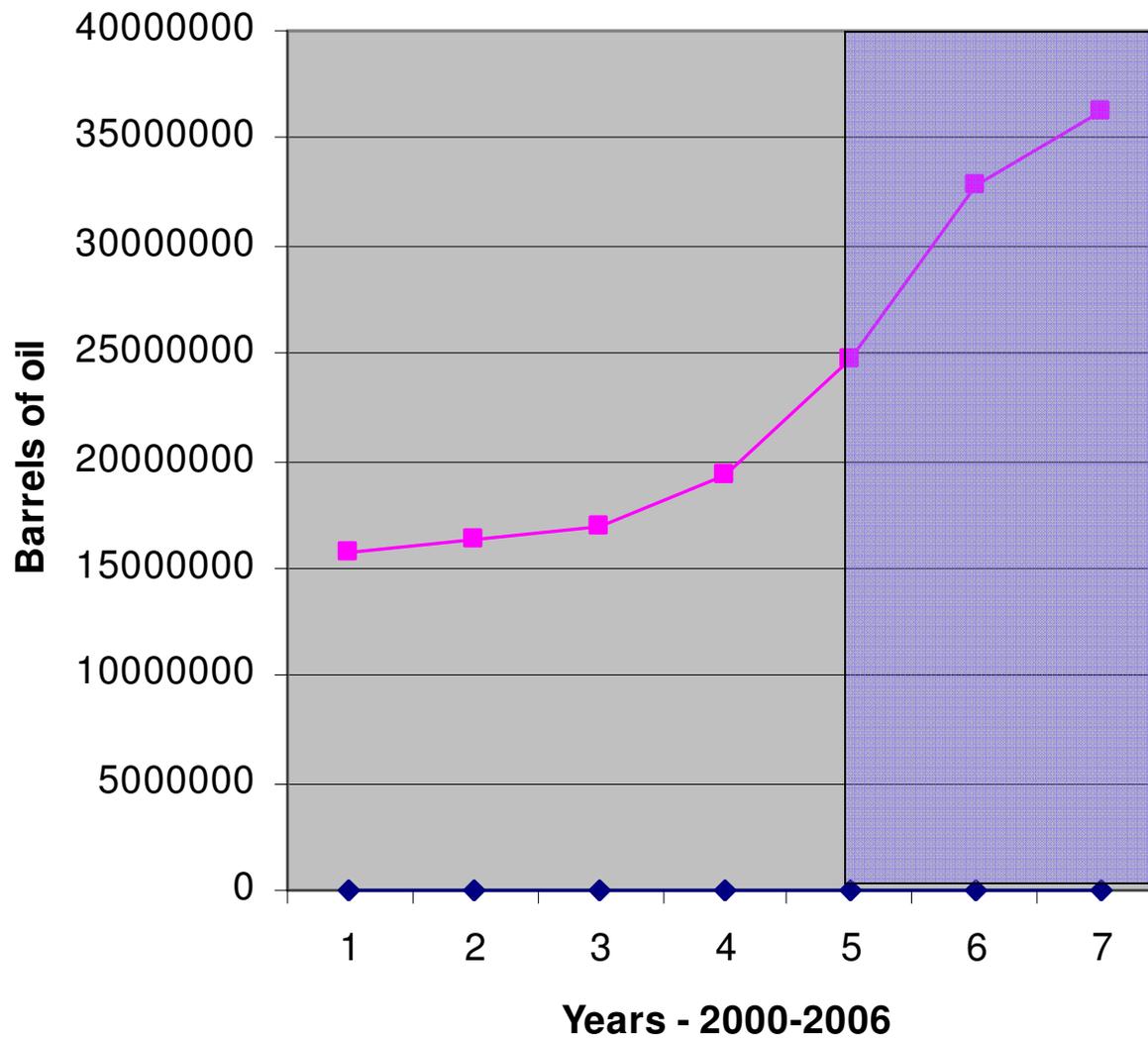
Oil Production in Montana

Year	Barrels/Year	Growth
2000	15,800,000	
2001	16,300,000	3.2%
2002	17,000,000	4.3%
2003	19,400,000	14.1%
2004	24,700,000	27.3%
2005	32,800,000	32.8%
2006	36,200,000	10.4%

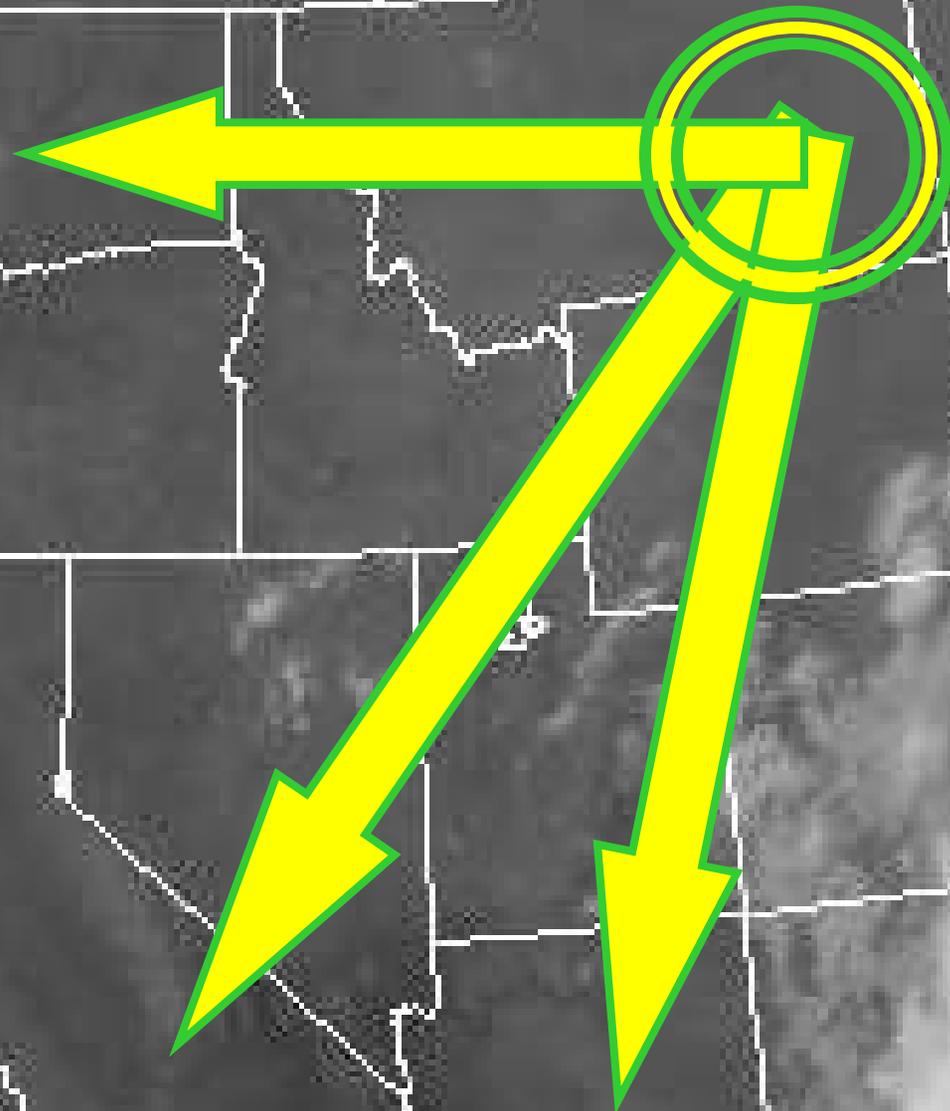
Alberta Oil Production = 700 Million bbls/yr

Over 20 x Montana's Production

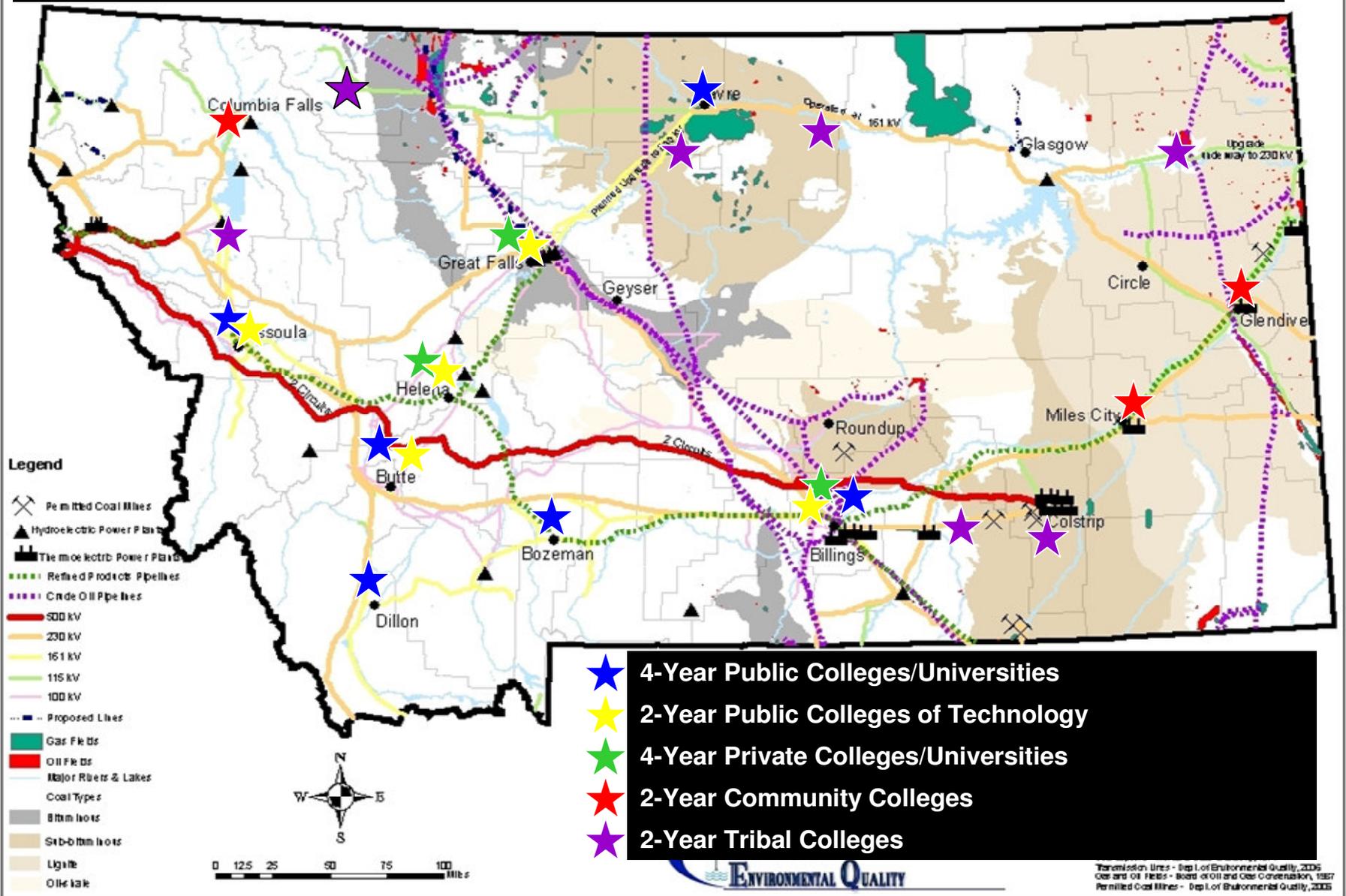
Montana Oil Production



**MONTANA
GREEN POWER
CAN SERVE
THE PACIFIC
NW, THE
SOUTHWEST
AND
CALIFORNIA**



Energy Resources & Educational Institutions



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21st Century Skills: Work Ready = College Ready

Apprenticeship

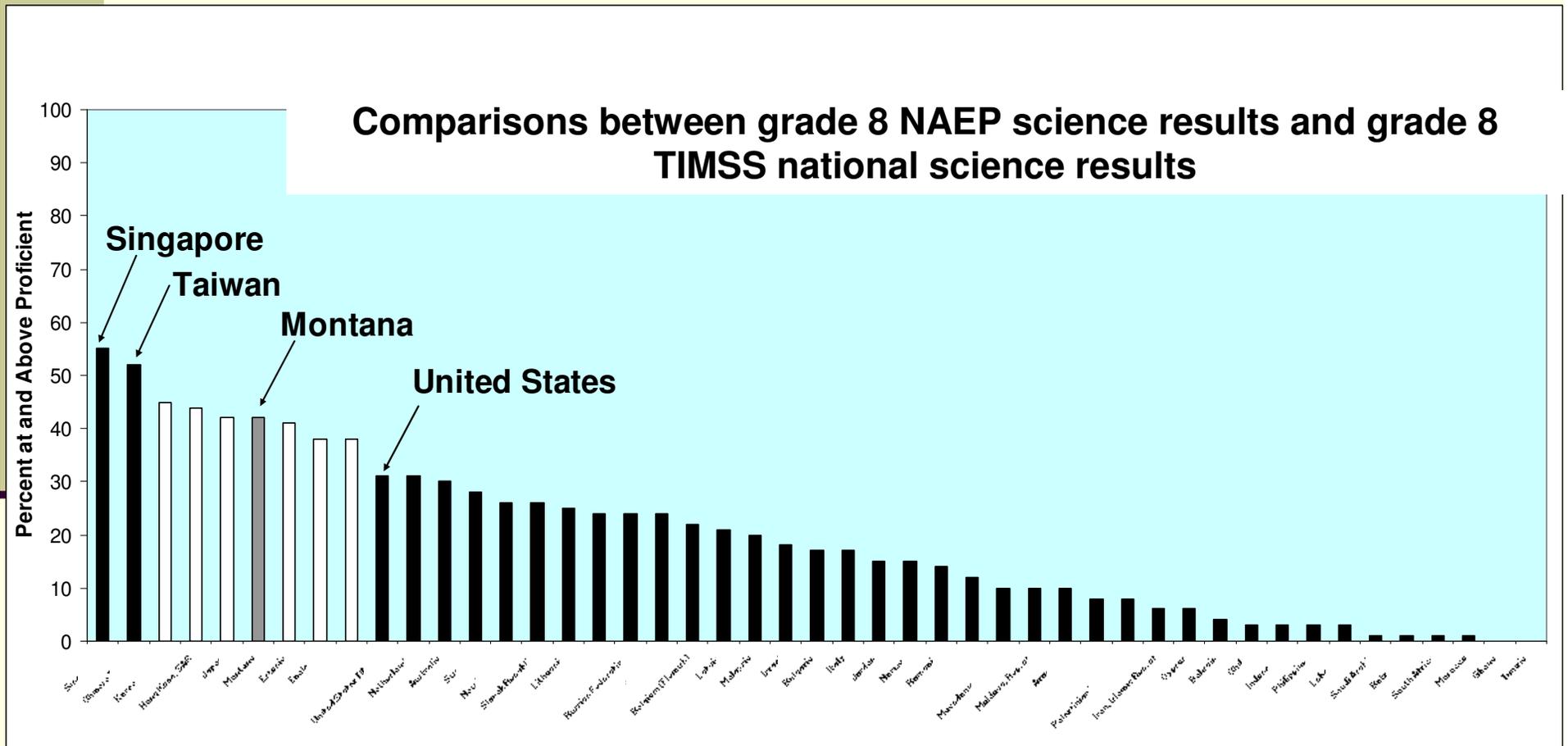




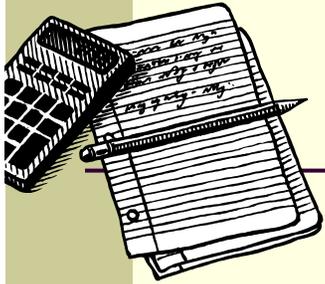
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Competitiveness

Governor and First Lady Math and Science Initiative



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Homework Assignments

School Readiness

-  Full time kindergarten

Students Ready for College and Work

-  Increasing Graduation Rates
-  Dual-Credit/Dual Enrollment
-  Global Competitiveness (Math & Science)

Coordinate a Technology Network

-  Distance Education

Close Tuition and Salary Gap

-  Access
-  Affordability
-  Transferability

Indian Education For All

Montana's on the *Move*

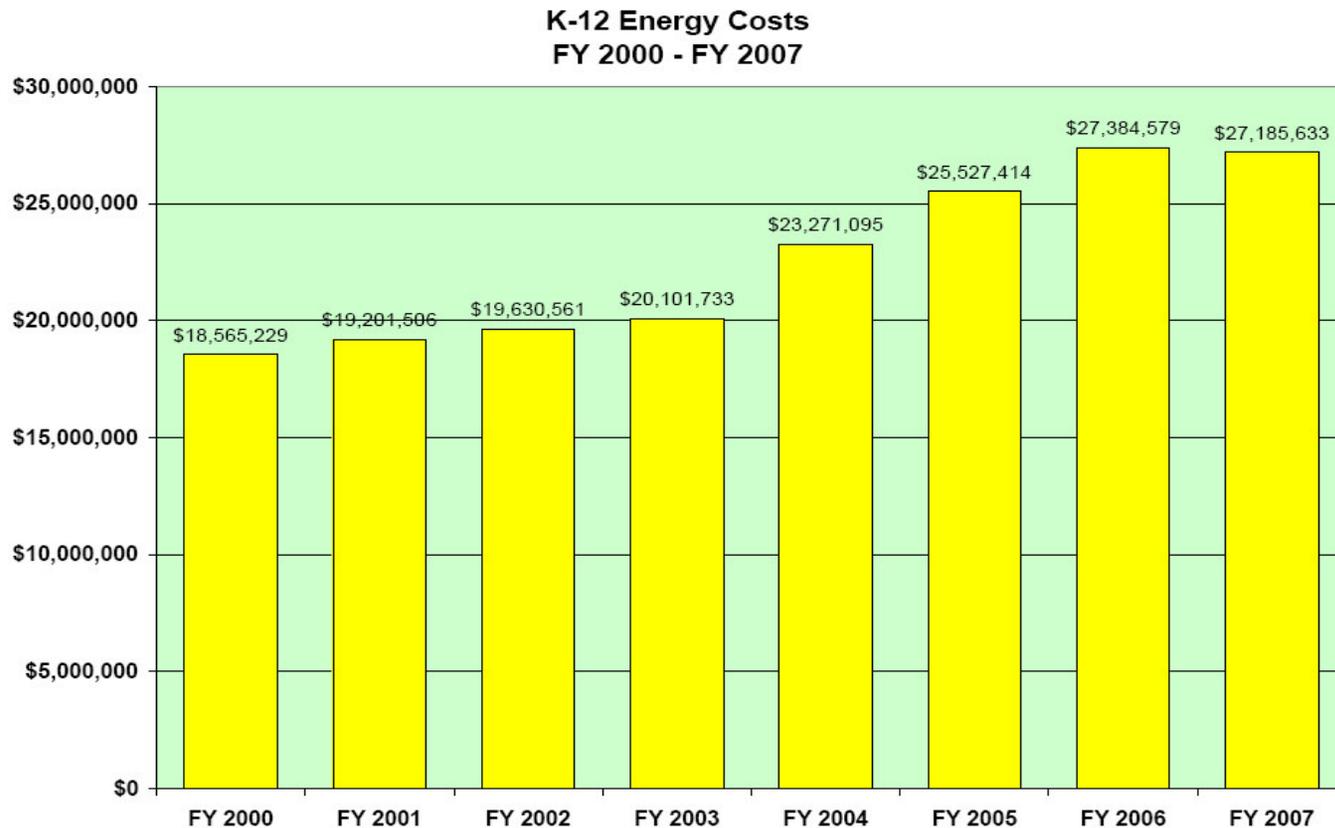
20x10

**State agencies to
reduce energy consumption by
20% by the year 2010**



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K-12 Energy Costs



K-12 Energy consumption for maintenance and operations of the schools like gas, electricity, and other heating fuels.



1/4/2008

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Transformational Generation



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Quality K-12 Education

